

Table B-1. Acute toxicity screening doses for wildlife.

Chemical	Mammalian				Acute Threshold ¹		Test Organisms	References
	Test Species	Test Species body wt (kg)	LD50 (mg/kg/day)	Mink normalized LD50 (mg/kg/day)	Mammalian (mg/kg/day)	Avian (mg/kg/day)		
Metals								
Aluminum	mouse	0.03	222	92.39	46.20	2498.5	mouse, quail	RTECS 1997, OPP 1995
Antimony	rat	0.35	30 ^c	23.07 ^c	23.07	-	rat	ATSDR 1991
Arsenic	mouse	0.03	3	1.25	0.62	21	mouse, quail	Schafer and Bowles 1985, OPP 1995
Barium	guinea pig	-	50	-	25	1254	guinea pig, quail	RTECS 1997, OPP 1995
Beryllium	mouse	0.03	6.9	2.87	1.44	-	mouse	RTECS 1997
Cadmium	mouse	0.03	36.8	15.32	7.66	50.6	mouse, chicken	RTECS 1997
Chromium	rat	0.35	42	32.30	16.15	-	rat	RTECS 1997
Cobalt	rat	0.35	750	576.87	288.44	-	rat	ATSDR 1990
Copper	mouse	0.03	69	28.72	14.36	1,108	mouse, quail	RTECS 1997
Iron	mouse	0.03	360	149.82	74.91	>2250	mouse, quail	FDA 1975, OPP 1995
Lead	rat	0.35	>725.5	558.03	>558.03	128	rat, quail	RTECS 1997, Hill and Camardese 1986
Manganese	rat	0.35	332	255.36	127.68	-	rat	ATSDR 1997
Mercury	rat	0.35	25.9	19.92	9.96	9.6	rat, quail	ATSDR 1994, Hill 1981
Methyl Mercury	guinea pig	-	17	-	8.5	10.5	guinea pig, quail	RTECS 1997
Nickel	rat	0.35	26	20.00	10.00	-	rat	RTECS 1997
Selenium	rat	0.35	3.2	2.46	1.23	-	rat	RTECS 1997
Silver	mouse	0.03	32	13.32	6.66	>2250	mouse, quail	RTECS 1997, OPP 1995
Thallium	mouse	0.03	42	17.48	8.74	-	mouse	Schafer and Bowles 1985
Vanadium	mouse	0.03	32	13.32	6.66	-	mouse	ATSDR 1992
Zinc	mouse	0.03	42	17.48	8.74	12.9	mouse, quail	RTECS 1997, Schafer and Bowles 1985
Conventionals								
Ammonia	-	-	-	-	-	-	-	-
Cyanide	rat	0.35	2.7	2.08	1.04	2	rat / kestrel	ATSDR 1991, HSDB 1995
PAHs								
Anthracene	mouse	0.03	8500	3537.52	>3537.52	50.5 ^a	mouse, red-winged blackbird	RTECS 1997, Schafer et al 1983
Benzo(a)anthracene	mouse	0.03	800	332.94	166.47 ^b	-	mouse	RTECS 1997
Benzo(a)pyrene	mouse	0.03	800	332.94	166.47 ^b	-	mouse	RTECS 1997
Benzo(b)fluoranthene	mouse	0.03	800	332.94	166.47 ^b	-	mouse	RTECS 1997
Benzo(g,h,i)perylene	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	-	-	-	-	-	-	-	-
Chrysene	mouse	0.03	800	332.94	166.47 ^b	-	mouse	RTECS 1997
Dibenz(a,h)anthracene	mouse	0.03	800	332.94	166.47 ^b	-	mouse	RTECS 1997

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Fluoranthene	rat	0.35	2000	1538.32	769.16	50.5 ^a	rat, red-winged blackbird	RTECS 1997, Schafer et al. 1983
Indeno(1,2,3-cd)pyrene	mouse	0.03	800	332.94	166.47 ^b	-	mouse	RTECS 1997
Phenanthrene	mouse	0.03	700	291.33	145.66	50.5 ^a	mouse, red-winged blackbird	RTECS 1997, Schafer et al 1983
Pyrene	mouse	0.03	800	332.94	166.47 ^b	-	mouse	RTECS 1997
PCBs								
Aroclor 1242	rat	0.35	4250	3268.93	1634.47	150	rat, pheasant	ATSDR 1991a, Eisler 1986
Aroclor 1254	rat	0.35	842	647.63	323.82	79	rat, pheasant	Hudson et al 1984, Eisler 1986
Aroclor 1260	rat	0.35	1300	999.91	499.95	91	rat, pheasant	Eisler 1986
PCBs (Total)	mouse	0.03	15	6.24	3.12	29	mouse, N. bobwhite	Eisler 1986
Pesticides								
4,4-DDD	dog	12.7	50	94.39	47.19	290	dog, pheasant	ATSDR 1992a, RTECS 1995
4,4-DDE	rat	0.35	880	676.86	338.43	-	rat	ATSDR 1992a, RTECS 1995
4,4-DDT	rat	0.35	750	576.87	288.44	297.5	mouse, quail	Ahdaya et al 1976, USFW 1984
Aldrin	rat	0.35	49	37.69	18.84	3.6	rat, starling	ATSDR 1991b, RTECS 1995
delta-BHC	-	-	-	-	-	-	rat, red-winged black	
gamma-BHC (Lindane)	rat	0.35	88	67.69	33.84	37.5	bird	ATSDR 1992b, OPP 1995
Chlordane	rat	0.35	83	63.84	31.92	12	rat, pheasant	Podowski et al 1979, Eisler 1990
alpha-Chlordane	-	-	-	-	-	-	-	
gamma-Chlordane	-	-	-	-	-	-	-	
cis-Nonachlor	-	-	-	-	-	-	-	
trans-Nonachlor	-	-	-	-	-	-	-	
Dieldrin	rat	0.35	5.3	4.08	2.04	11.7	rat, chukar	Bedford et al 1975, Tucker et al 1971
Endosulfan	rat	0.35	100	76.92	38.46	13.9	rat, mallard	RTECS 1995
Endrin Ketone	-	-	-	-	-	-	-	
Heptachlor	rat	0.35	72	55.38	1.96	47	rat, quail	ATSDR 1991c, RTECS 1995
Heptachlor epoxide	rat	0.35	60	46.15	2.96	-	rat	ATSDR 1991c, RTECS 1995
Oxychlordane	-	-	-	-	-	-	-	
Semivolatile Organics								
1,1-Biphenyl	-	-	-	-	-	-	-	
2,4,5 Trichlorophenol	rat	0.35	2960	2276.72	1138.36	-	rat	ATSDR 1997

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2,4,6-Trichlorophenol	-	-	-	-	-	-	-	-
2,4-Dichlorophenol	-	-	-	-	-	-	-	-
2,4-Dimethylphenol	-	-	-	-	-	-	-	-
2,4-Dinitrophenol	rat	0.35	30	23.07	11.54	-	rat	NIOSH 1985
2-Chlorophenol	mouse	0.03	346	144.00	72.00	57	mouse; red-winged blackbird	ATSDR 1997, Schaefer et al 1983
2-Methylphenol	rat	0.35	1350	1038.37	519.18	-	rat	ATSDR 1990
2-Nitrophenol	-	-	-	-	-	-	-	-
3,3-Dichlorobenzidine	rat	0.35	3820	2938.19	1469.10	-	rat	ATSDR 1997
4,6-Dinitro-2-methylphenol	-	-	-	-	-	-	-	-
4-Chloro-3-methylphenol	-	-	-	-	-	-	-	-
4-Methylphenol	rat	0.35	1800	1384.49	692.24	57	rat / red-winged blackbird	Diechmann & Witherup 1944, Schaefer et al 1983
4-Nitrophenol	-	-	-	-	-	-	-	-
bis(2-Ethylhexyl)phthalate	rat	0.35	31000	23843.98	11921.99	-	rat	NIOSH 1985
Butylbenzylphthalate	-	-	-	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-	-	-	-
Di-n-octylphthalate	-	-	-	-	-	-	-	-
Pentachlorophenol	rat	0.35	50	38.46	19.23	314	rat; quail	ATSDR 1989, OPP 1995
Phenol	mouse	0.03	300	124.85	62.43	-	mouse	ATSDR 1989

¹ Acute toxicity is the lethal dose to 50 percent of the organisms tested (LD50) divided by 2. This is consistent with EPA's guidance for aquatic LC50s (Stephan et al. 1985). If a LD50 was not available, a LDLo (the lowest concentration to cause deaths) was used.

^a No effect level estimated using "surrogate" low molecular weight PAH.

^b No effect level estimated using "surrogate" high molecular weight PAH.

^c LOAEL for decreased survival divided by 10.

- = Not available.